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Summary of Kinder Morgan Technical Testimony: Definitions (Section 7)

Proposed Rule 20.2.50 – Oil and Gas Sector – Ozone Precursor Pollutants
Commencement of Hearing: September 20, 2021

Technical Witness

- Leslie Nolting, EHS Specialist / EHS Manager – Air Permitting Compliance, Kinder Morgan

- Resume and qualifications at Exhibit I of the Kinder Morgan NOI to Present Direct Technical Testimony

Overview

- Definitions for discussion
  - Gathering and boosting station
  - Natural gas compressor station
  - Transmission compressor station
- Important changes have been made to these definitions since the July 28 rule draft, which we support

We ask the Board adopt NMED's changes related to these terms as reflected in NMED's September 16 draft.

Distinguishing Transmission and Storage

- It is important to clearly distinguish between the Transmission and Storage (“T&S”) Segment and the Gathering & Boosting (“G&B”) Segment
  - Differences are significant and ERG’s work acknowledges this

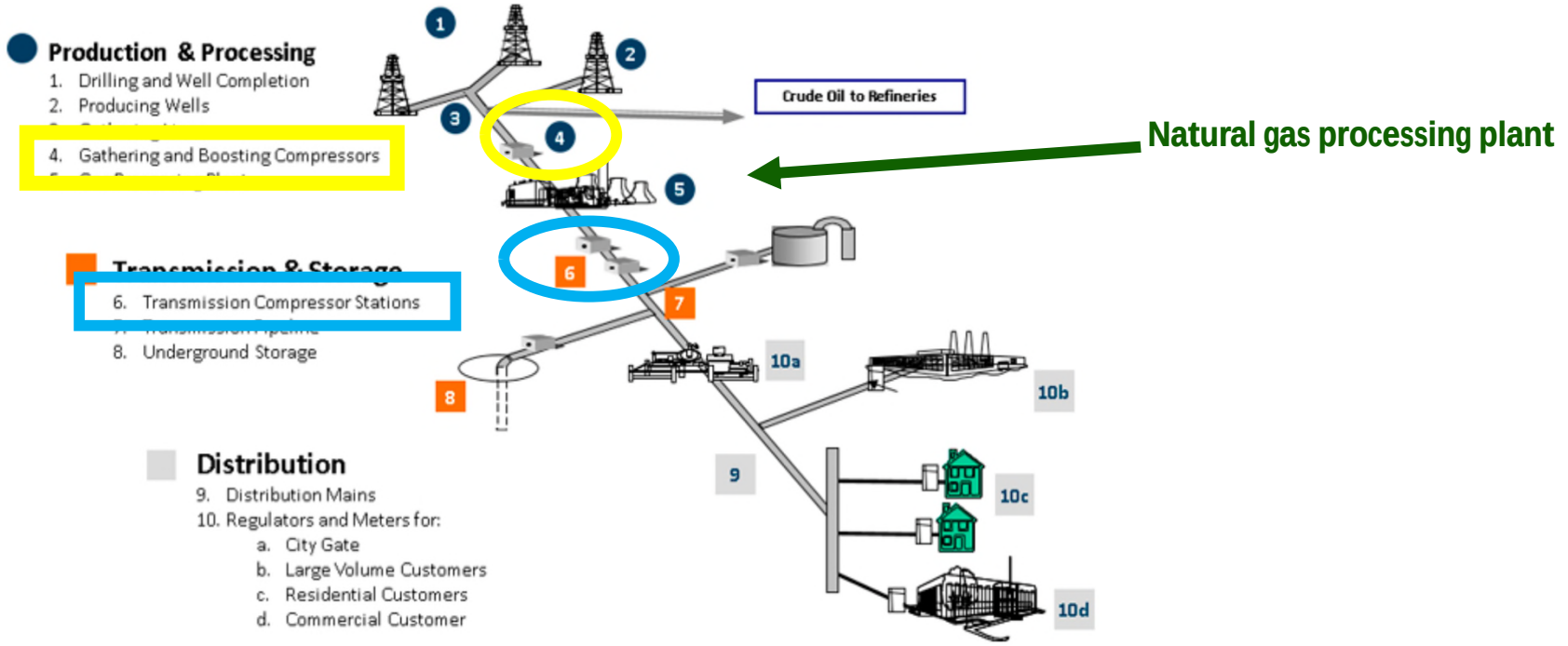

Figure 2. Schematic of the natural gas and petroleum system supply chain.

Source: Adapted from the American Gas Association and EPA Natural Gas STAR Program.

Current (September 16) Definitions

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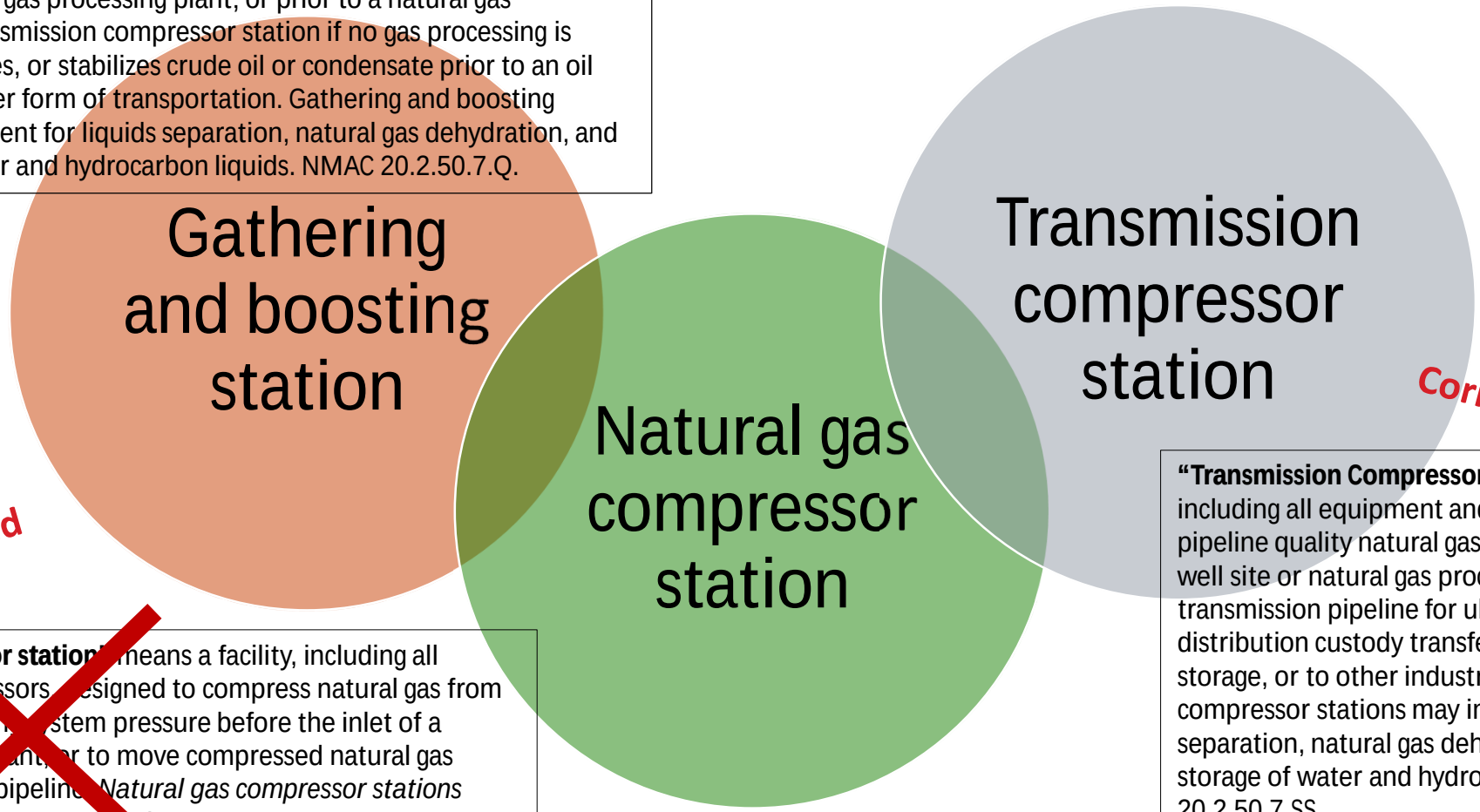
"Gathering and boosting station" means a facility, including all equipment and compressors, located downstream of a well site that collects or moves natural gas prior to the inlet of a natural gas processing plant; or prior to a natural gas transmission pipeline or transmission compressor station if no gas processing is performed; or collects, moves, or stabilizes crude oil or condensate prior to an oil transmission pipeline or other form of transportation. Gathering and boosting stations may include equipment for liquids separation, natural gas dehydration, and tanks for the storage of water and hydrocarbon liquids. NMAC 20.2.50.7.Q.



Deletion implemented

~~**"Natural gas compressor station"** means a facility, including all equipment and compressors designed to compress natural gas from well pressure to gathering system pressure before the inlet of a natural gas processing plant, or to move compressed natural gas through a transmission pipeline. *Natural gas compressor stations include transmission compressor stations*. NMAC 20.2.50.7.W.~~

Corrections addressed

"Transmission Compressor Station" means a facility, including all equipment and compressors, that moves pipeline quality natural gas at increased pressure from a well site or natural gas processing plant through a transmission pipeline for ultimate delivery to the local distribution custody transfer station, into underground storage, or to other industrial end users. Transmission compressor stations may include equipment for liquids separation, natural gas dehydration, and tanks for the storage of water and hydrocarbon liquids. NMAC 20.2.50.7.SS.

Definition: Natural Gas Compressor Station

- Duplication and overlap creates significant implementation and compliance concerns

- Applicability sections of each rule
  - Almost all applicability sections used to reference both “gathering and boosting stations” and “natural gas compressor stations”

20.2.50.113 ENGINES AND TURBINES:

A. Applicability: Portable and stationary natural gas-fired spark ignition engines, compression ignition engines, and natural gas-fired combustion turbines located at well sites, tank batteries, gathering and boosting stations, natural gas processing plants, and ~~natural gas~~transmission compressor stations, with a rated horsepower greater than the horsepower ratings of table 1, 2, and 3 of 20.2.50.113 NMAC are subject to the requirements of 20.2.50.113 NMAC. Non-road engines as defined in 40 C.F.R. §§ 1068.30 are not subject to 20.2.50.113 NMAC.

NMED has replaced “natural gas compressor station” with “transmission compressor station” throughout the Proposed Rules.

Definition: Natural Gas Compressor Station

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- Section 122 (pneumatic controllers and pumps)
  - Table 1 schedule – well sites, tank batteries, and gathering and boosting stations
  - Earlier version of Table 2 (*different*) schedule – natural gas processing plants and gathering and boosting station

Table 1 – WELL SITES, TANK BATTERIES, GATHERING AND BOOSTING STATIONS

Total Historic Percentage of Non-Emitting Controllers	Total Required Percentage of Non-Emitting Controllers by January 1, 2024	Total Required Percentage of Non-Emitting Controllers by January 1, 2027	Total Required Percentage of Non-Emitting Controllers by January 1, 2030
> 75%	80%	85%	90%
> 60-75%	80%	85%	90%
> 40-60%	65%	70%	80%
> 20-40%	45%	70%	80%
0-20%	25%	65%	80%

Table 2 – ~~NATURAL GAS~~TRANSMISSION COMPRESSOR STATIONS AND GAS PROCESSING PLANTS

Total Historic Percentage of Non-Emitting Controllers	Total Required Percentage of Non-Emitting Controllers by January 1, 2024	Total Required Percentage of Non-Emitting Controllers by January 1, 2027	Total Required Percentage of Non-Emitting Controllers by January 1, 2030
> 75%	80%	95%	98%
> 60-75%	80%	95%	98%
> 40-60%	65%	95%	98%
> 20-40%	50%	95%	98%
0-20%	35%	95%	98%

Definition: Transmission Compressor Station

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- **NMED's revisions more accurately reflect transmission compressor stations operations**
  - Reference to "pipeline quality" natural gas
  - Reference to natural gas processing "plants" rather than "facilities"
  - Reference to transmission "through" a pipeline rather than "in" a pipeline
  - List of delivery end-points to reflect all potential end-points

~~TT~~SS. **"Transmission Compressor Station"** means a facility, including all equipment and compressors, that moves pipeline quality natural gas at ~~elevated~~increased pressure from a well ~~sites~~site or natural gas processing ~~facilities in~~plant through a transmission ~~pipelines~~pipeline for ultimate delivery to ~~natural gas~~the local distribution ~~pipelines or into~~company custody transfer station, underground storage, or to other industrial end users. Transmission compressor stations may include equipment for liquids separation, natural gas dehydration, and tanks for the storage of water and hydrocarbon liquids.

In sum

Accept NMED's changes:

- Removing the definition of natural gas compressor station
- Replacing "natural gas compressor station" with "transmission compressor station," where appropriate
- Refining the definition of transmission compressor stations

IMPORTANT: These requested changes will not substantively revise the scope of rule, but are extremely important for clarity during implementation

Questions?